



George Mason University in partnership with
National Domestic Preparedness Coalition
Homeland Security Partnership
May 18, 2007



Proposal:

Homeland Security Comprehensive Assessment Model (HLS-CAM™) Training, Certification and Assessment for the Commonwealth of Virginia Institutions of Higher Education

Proposed Equipment:

**Homeland Security Comprehensive Assessment Model (HLS-CAM™)
Training, Certification and Assessment**



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Confidential

SUMMARY

Before universities can write adequate emergency plans, deploy expensive technology, implement permanent security solutions, mitigate an attack, and before responders can adequately respond to an event, institutions of higher learning must complete comprehensive assessments of their campuses.

Through the George Mason University / National Domestic Preparedness Coalition Homeland Security Partnership, Institutions of higher education throughout the Commonwealth of Virginia, will receive the three day Homeland Security Comprehensive Assessment Model (HLS-CAM™) Training and Certification course and an optional on-site Assessment of their campus, for up to 35 individuals. Course participants will represent multiple disciplines from the institution, along with emergency responders from the institution's respective community. The HLS-CAM™ will provide institutions of higher learning with a uniform method of assessing their campuses, helping them identify security strengths and weaknesses, identify and prioritize their critical facilities, infrastructure and events and complete vulnerability assessments in order to provide a safe and secure environment for their students, faculty, staff and visitors.

The HLS-CAM™ is a comprehensive assessment that defines an institution of higher education's community, evaluates an institution's strengths and weaknesses, identifies critical infrastructure and key resources (CI/KR), identifies the threats to the community, prioritizes (CI/KR) and provides a comprehensive vulnerability assessment. The NDPCI developed the HLS-CAM and provides training for Emergency Responders and Private Industry representatives in the HLS-CAM methodology throughout the country. The Department of Homeland Security has funded several grants to validate the effectiveness of HLS-CAM in a variety of environments and the methodology has been adopted by several states. Additionally, the methodology has been used to assess hundreds of schools across the country. The methodology was recently featured by the Department of Homeland Security on their Lessons Learned Information Sharing website.

The partnership between George Mason University, the first university to apply the HLS-CAM methodology on a university campus and the National Domestic Preparedness Coalition, the creator of the HLS-CAM, places GMU in a unique position to assist other universities, by adding the distinctive perspective of an institution of higher education as it applies to the assessment process and the evaluation of campus security.

There are two delivery options available to the institution: The first delivery option offers a three day HLS-CAM training course which will be held on site at the recipient school. School representatives will learn the methodology and would be certified to conduct HLS-CAM assessments on their own. Certified assessors will be taught how to apply assessment results to implement security solutions and deploy security technology in coordination with local responders. The second option includes the three day HLS-CAM course, and after the completion of the course, representatives from the NDPCI and GMU will facilitate the institution through the entire assessment process, leaving the institution with a completed threat assessment of their campus, a prioritized critical facility, infrastructure and event list and a completed vulnerability assessment on a high profile campus facility, infrastructure or event.



1.0 Introduction

In response to the tragic events at VA Tech, universities, colleges, and schools in VA, and across the nation, are rushing to re-evaluate campus security. George Mason University and the National Domestic Preparedness Coalition are in a unique position to assist other universities and institutions of higher learning in their efforts to secure their campus. In order to secure a campus and avoid the implementation of security solutions that may later prove to be both costly and ineffective, the first and most critical step is to conduct a comprehensive security assessment in coordination with local emergency responders. Adequate planning and coordination is extremely important in the deployment of technology particularly in regards to closed circuit television cameras and access control systems.

In March 2006, the Department of Homeland Security (DHS) funded an evaluation of the Homeland Security Comprehensive Assessment Model (HLS-CAM), a comprehensive risk and vulnerability assessment methodology and the evaluation of automated video surveillance systems at George Mason University. The objective of the project was to use a robust risk assessment methodology, the HLS-CAM, to evaluate a major urban university's security. The HLS-CAM evaluates the university's strengths and weaknesses as they relate to security and identifies and prioritizes its critical facilities, infrastructure, and events. In addition, the methodology evaluates the university's response capabilities, identifies threats to the university and determines the threats' most likely course of action. Finally, the HLS-CAM provides a comprehensive vulnerability assessment to complete on-site assessments of the university's facilities. In this evaluation, the HLS-CAM was used as the prelude to the deployment of technology/equipment applications, specifically automated video surveillance.



At the commencement of this project, the NDPCI conducted a 3 day HLS-CAM training course at GMU. Course participants included GMU representatives from multiple disciplines including, faculty, computer service personnel, facility management personnel, emergency management personnel, law enforcement, fire, laboratory staff, and students. After the training was complete, the NDPCI facilitated the HLS-CAM assessment of the GMU Fairfax Campus. Course participants made up the assessment team and completed the campus assessment. Results indicate that HLS-CAM is an effective and efficient tool which can be used to assess a major university campus using university personnel and representatives.

The National Domestic Preparedness Coalition (NDPCI) created the Homeland Security Comprehensive Assessment Model (HLS-CAM™) shortly after the September 11th attacks, recognizing the need for federal, state, county, local and private organizations charged with protecting citizens, facilities, and infrastructure from all hazards including terrorism and criminal activity, to have a uniform, comprehensive, and holistic method of performing assessments.

The NDPCI provides training for Emergency Responders and Private Industry representatives in the HLS-CAM methodology. DHS has funded several grants to validate the effectiveness of HLS-CAM in a variety of environments and the methodology has been adopted by several states. Additionally, the methodology has been used to assess hundreds of schools across the country. The methodology was recently featured by the Department of Homeland Security on their Lessons Learned Information Sharing website.

The HLS-CAM meets and exceeds the baseline criteria for risk and vulnerability assessment required by the National Infrastructure Protection Plan (NIPP), complies with all four objectives of Homeland Security Presidential Directive 7, and is an 'All Hazards' assessment.

The HLS-CAM™ is a grass roots bottom up effort, developed by Emergency Responders for Emergency Responders. George Mason University provides the prospective necessary to assess the unique campus security issues facing institutions of higher learning. Participants indicate that they more readily accept the



HLS-CAM process because it is not a commercial venture thrust upon them; rather it is a homegrown, grassroots methodology developed by people who walk in their shoes.

The HLS-CAM™ methodology has been adopted by the State of Florida as the State's assessment model and is the State of Georgia's "preferred method of conducting assessments of privately owned critical facilities and infrastructure". Hundreds of individuals representing many jurisdictions and private industry throughout the nation have been trained and certified in the HLS-CAM™ methodology by the NDPCI. As training continues, **evaluations by students, including community leaders, comment on the cost effectiveness of the training, the ease in which the assessment model is completed, and the flexibility designed into the process.**

George Mason University (GMU) is a major, nationally recognized university. The Administration of Justice Department at GMU offers Homeland Security undergraduate course work in Threat Risk and Vulnerability Assessment Methodologies and has recognized expertise in homeland security program management. The GMU Office of Continuing Professional Education has extensive experience providing professional education and training.

The partnership between George Mason University, the first university to apply the HLS-CAM methodology on a university campus and the National Domestic Preparedness Coalition, the creator of the HLS-CAM, places GMU in a unique position to assist other universities in the evaluation of their campus security.



1.1 Company Overview

With four locations in the Washington, D.C. area, George Mason University is a major university with nationally recognized excellence in interdisciplinary research and teaching.

The Administration of Justice Department at George Mason University is a multi-disciplinary unit in the College of Humanities and Social Services and offers the following degree programs: BS in Administration of Justice, MA in Justice, Law, and Crime Policy (JLCP), PhD in Justice, Law, and Crime Policy (JLCP), Justice Concentration in the Master of Public Administration Program, and a Minor in Administration of Justice. The ADJ department has nine full-time faculty and 35 part-time instructors, engaged in teaching and research. It is home to the Center for Justice, Leadership & Management. The Center provides training and research assistance to policy makers and professionals in the justice and homeland security fields.

George Mason University's Office of Continuing Professional Education (OCPE) works regionally, nationally and internationally to develop, facilitate and provide professional education and training to help organizations, agencies, companies and individuals increase productivity through employee and personal development.

The National Domestic Preparedness Coalition (NDPCI) was conceived by the Orange County Sheriff's Office, Orange County, Florida, the West Virginia University School of Medicine and the West Virginia National Guard and has emerged as a standalone 501(c) 3 non-profit organization, incorporated in the State of Florida in January, 2003. The National Domestic Preparedness Coalition provides solutions that help protect our Nation's communities from **all hazards** including terrorism and natural disaster by providing the highest quality training, and programs, developed through partnerships and participation by those on the front lines, emergency responders, private industry, and our citizens, who know best how to address their homeland security needs.

The partnership has established contract vehicles in place with the US government for immediate placement of orders and can accept VISA payment.

Central Contractor Registration Status: Active in CCR; Registration Valid until 1/15/2008

CAGE/NCAGE Code: 4BK36
DUNS: 555777486
TIN/EIN: 223891516
Applicable FSC Codes: 6910

52.212-3 Paragraph (j) (j)(1) *Annual Representations and Certifications*:
NDPCI has completed the annual representations and certifications electronically via the ORCA website:
<http://orca.bpn.gov>.

Company URL: www.ndpci.us / <http://adj.gmu.edu/>

The National Domestic Preparedness Coalition has ten (10) full and part-time employees and volunteers and has over twenty (20) HLS-CAM™ certified instructors from the emergency response community who instruct the HLS-CAM™ certification course and facilitate the HLS-CAM™ Assessment.



2 Technical Performance and Operational Details

The National Domestic Preparedness Coalition will provide HLS-CAM™ training and certification for up to 35 individuals representing multiple disciplines and emergency responders from the institution of higher learning and their respective community. The HLS-CAM™ course will be held in the locale of the institution.

2.1 HLS-CAM™ Methodology Training and Certification

The HLS-CAM™ Training course is a three-day course that provides the student with a working knowledge of the HLS-CAM™ process. It also provides the tools necessary for the student to use the HLS-CAM™ model in their particular community in conjunction with their jurisdictional expertise. Classroom training includes many hands on exercises and an on-site vulnerability assessment. **Course evaluations indicate that the training is easy to understand and apply.**

A core group of HLS-CAM™ certified instructors instruct the HLS-CAM™ course. HLS-CAM instructors include both current and retired Law Enforcement personnel, Fire Department Personnel, Health and Medical personnel, Emergency Managers and Security Experts from the private sector.

The training is comprised of the HLS-CAM™ Threat Assessment, Criticality Assessment, M/D-SHARPP Matrix and the Community Priority Assessment Plan. In concert, these mechanisms serve as a tool that is used to determine priority in which vulnerability assessments will be completed. The students will then receive training on the HLS-CAM™ comprehensive vulnerability assessment model.

The first step in the HLS-CAM™ process is the Threat Assessment. The Threat Assessment examines and defines a community, identifies critical facilities, infrastructures and events, identifies threat groups, and helps determine the likelihood that, given the current intelligence or designated federal, state or local threat levels, a specific target will be subject to terrorist or hostile criminal attack.

The second step in the HLS-CAM™ process is the Criticality Assessment. Criticality Assessment determines the overall impact of a terrorist attack on a given target and the adverse effect it has within a community. The third step in the HLS-CAM™ process is the M/D-SHARPP Matrix. The M/D-SHARPP is used to analyze criminal and/or terrorist targets that have been identified through the Community Threat Assessment and Criticality Assessment. The M/D-SHARPP further analyzes the targets using information obtained in the Threat Assessment and looks at the target through the threat group's perspective.

The fourth step in the HLS-CAM™ process is the Community Priority Assessment Plan. The Community Priority Assessment Plan (CPAP) is derived from the Criticality Assessment and the M/D-SHARPP Matrix and is used to determine the order of priority for the vulnerability assessment of critical facilities, infrastructure, and events as identified during the Community Threat Assessment.

The fifth and last step in the HLS-CAM™ process is the Vulnerability Assessment. The Vulnerability Assessment is a critical on-site physical examination and thorough inspection of an assets perimeter, property within the perimeter, and building exterior and interior spaces to include all operational systems and procedures along with the security of a facility.

See Figure 1, HLS-CAM™ Course Syllabus

2.2 HLS-CAM™ Training Manual

Each student attending the HLS-CAM™ Course will be provided with a HLS-CAM™ Training Manual.

2.3 HLS-CAM™ Forms and Resource CD

Each student attending the HLS-CAM™ Course will receive an auto play CD with all applicable HLS-CAM™ forms in Microsoft Word and Excel, all organized within a web-based look and feel format. The HLS-CAM™ CD also contains a vast resource list.



HLS-CAM™ Course Syllabus:

| Day 1 | | Day 2 | | Day 3 | |
|------------|--|-----------|--|-----------|--|
| Time | Activity | Time | Activity | Time | Activity |
| 0830- 0950 | Course Introduction Instructor Introduction Student Introductions Pre-training Survey Course Outline | 0900-0950 | Criticality Assessment Five Categories of Consequences Death and Injury Economic Impact Environmental Impact Critical Infrastructure Symbolic Effect | 0900-0950 | Vulnerability Assessment Building Exterior Building Interior |
| 1000-1200 | Threat Assessment Definition of The Community Mission Boundaries Intelligence Terrain Weather Logistical Infrastructure Critical Infrastructure/Facilities/Events Community Effects Emergency Response Providers Medical Considerations Law Enforcement Considerations Private Security Considerations Evaluation of the Threat Criminal Intelligence Information Intelligence Collection Analysis of Information | 1000-1100 | Practical Exercise | 1000-1050 | Vulnerability Assessment Building Interior Non-Agency Tenants Hazardous Materials Computer Applications Security/Alarm Systems Policy/Procedures |
| | | 1110-1200 | Group Presentations | 1100-1200 | Vulnerability Assessment Kit Distribution and Familiarization and/ or Practical Exercise |
| 1200-1300 | Lunch | 1200-1300 | Lunch | 1200-1300 | Lunch |
| 1300-1400 | Practical Exercise | 1300-1350 | M/D SHARPP Process Mission Demography Symbolism History Accessibility Recognizability Population Proximity Method of Attack | 1300-1530 | Practical Exercise On-site Vulnerability Assessment w/ hands on application of V/A Kit Equipment |
| 1415-1430 | Group Presentations | | | 1530-1600 | Group Presentations |
| 1430-1520 | Terrorism Potential Threat Elements Terrorism Overview Evaluation of the Threat Existence History Intentions Capability Targeting Method of Operations Threat Course of Action | | | 1610-1700 | Post-training Survey Questions & Comments Review /Certificates |
| 1530-1620 | Practical Exercise | 1400-1430 | Practical Exercise | | |
| 1630-1700 | Group Presentations HLS-CAM Day Review | 1430-1500 | Presentations | | |
| | | 1500-1530 | Community Priority Assessment Plan (CPAP) | | |
| | | 1540-1700 | Vulnerability Assessment Building Exterior | | |

Figure 1, HLS-CAM Course Syllabus



2.4 Delivery Options

There are two delivery options available to the institution.

The first option offers a three day HLS-CAM training course which will be held on site at the recipient university or college. Institution representatives will learn the methodology and will be certified to conduct HLS-CAM assessments on their own. Locally certified assessors will be taught how to apply assessment results to implement security solutions and deploy security technology in coordination with local responders.

The second option offers the three day HLS-CAM course which would be held on site at the recipient university or college. Institution representatives will learn the methodology and would be certified to conduct HLS-CAM assessments on their own. After completion of the training, the NDPCI and GMU will facilitate the assessment of the school. School representatives, who have received training in the HLS-CAM methodology, will begin the assessment process for the campus. The participants with the help of HLS-CAM facilitators will define the institution as a community and assess the institution as defined. Participants will identify and assess threats to the school, using an all hazards approach and identify the school's critical facilities, critical infrastructure, and events (Critical Infrastructure / Key Resources (CI/KR)). With the assistance of HLS-CAM facilitators, school participants will then, prioritize the institution's CI/KR. The participants will use two prioritization matrixes to prioritize the CI/KR. Participants will use the HLS-CAM Criticality Assessment and the HLS-CAM M/D-SHARPP Matrix to prioritize and will have a prioritized list in the form of the HLS-CAM Community Priority Assessment Plan.

The participants, along with the facilitators, and George Mason University Representatives will review the prioritized list and select one (1) critical facility to be assessed by course participants, with the help of facilitators, using the HLS-CAM vulnerability assessment. The HLS-CAM vulnerability assessment is an on-site critical assessment of the facility's perimeter, building exterior, building interior and systems within the facility.

With both options, George Mason University will conduct a pre-training survey of the participants understanding of the assessment process and awareness of issues relating to prevention, protection, response and recovery from all hazard events. At the conclusion of the training, and in applicable circumstances, the campus assessment, George Mason University will conduct a post-training survey to again measure the participant understanding of the assessment process and awareness related to prevention, protection, response and recovery from an all hazard event.

2.5 Optional Vulnerability Assessment Kit

Optional Equipment Vulnerability Assessment Kit

To complement the HLS-CAM™ Training and Certification, each institution that receives the training may purchase a state of the art Vulnerability Assessment Kit. The vulnerability assessment kit contains all of the tools necessary to complete an assessment of a critical facility, infrastructure or event. The V/A Kit includes easy to use equipment including a laptop computer with preloaded, HLS-CAM™ forms in Microsoft Word and Excel, all organized in a web-based look and feel format and accessible at the click of an icon. The kit also includes a 12X zoom Digital Camera, GPS, Range Finder, one gigabyte SD Memory Card, tool kit, clipboard, paper and mechanical pencils. All equipment is set up, ready to use, for turnkey operation.



- 3 References of tests performed on the HLS-CAM™ Methodology by an independent laboratory government or commercial entity.

The Office of Grants and Training (G&T) completed an independent evaluation of the HLS-CAM™ for the System Assessment and Validation for Emergency Responders Program (SAVER). The following is the conclusion of the independent report:

"Comparative Analysis Evaluation of Assessment Methodologies:
Phase II – Task 3 HLS-CAM - Validation Team

IV. Conclusion & Recommendations

The results of this task demonstrate several important points and have also illuminated a few points that are less obvious. First, the HLS-CAM does satisfy the baseline requirements that the NIPP determines are necessary for assessment methodologies as well as the National Strategy for the Physical Protection of Critical Infrastructure and Key Assets. A great deal of thought has gone into the development of these criteria and it is imperative that the assessment selected by OGT as the methodology of choice for responders and others comply with them.

Next, the Validation Team found the HLS-CAM to be a robust but uncomplicated methodology that can be used at State, Territorial, regional, local, tribal and private sector levels by emergency responders to accurately identify and classify the cross-sector Critical Infrastructure / Key Resources (CI/KR) that a terrorist may target. While there are several private and public "vulnerability assessment" models available to local and state government, the HLS-CAM is a comprehensive assessment process that integrates a variety of proven, applicable evaluation elements into an all-inclusive model. Furthermore, local and State officials have indicated that many of the models available are not applicable to their needs, or the cost of application is excessive. The HLS-CAM was developed as a grassroots, bottom-up effort, designed specifically to meet the responders' needs.

This effort has highlighted the importance of interactions among stakeholders and how a collaborative effort can be instrumental in providing a more comprehensive preparedness posture to a community. The interviews conducted for HLS-CAM uncovered events that would not be easily identified by terrorists during their research efforts."

Finally, and most importantly, the HLS-CAM assessment captured 92% of the Critical Infrastructure (CI) identified by the Validation Team. This is significantly higher than the 80% goal set by OGT and clearly indicates the utility of this methodology.

For these reasons, the HLS-CAM is considered by the Validation Team to be a valid methodology to identify both national and local critical infrastructure across multiple sectors and is appropriate for use as the assessment of choice for local responders.

- 4 References of a Federal, State or Local Government Agency or Institution of Higher Learning Currently Using HLS-CAM™

| | |
|----------------------------|---|
| Name of Agency: | Georgia Tech |
| Mailing Address: | Georgia Tech Security & Police Department 879 Hemphill Avenue, NW Atlanta, GA 30332-0440 |
| Relevant Point of Contact: | Andrew A. Altizer, Director of Emergency Preparedness |
| Phone Number: | (404) 894-8392 |
| Email Address: | andy.altizer@police.gatech.edu |
| Name of Agency: | Dept of Safety, Division of Emergency Services |
| Mailing Address: | 50 Communications Drive, Laconia, NH 03246 |
| Relevant Point of Contact: | Sean R. Goodwin, Assistant to the Director of Homeland Security |
| Phone Number: | (603) 527-2069 |
| Fax Number: | (603) 527-2073 |
| Email Address: | sgoodwin@nh911.state.nh.us |



5 Training Delivery

HLS-CAM™ Training

HLS-CAM™ Training will take place at the locale of the institution to receive training. The HLS-CAM™ course is a three day course. All course materials are supplied by the National Domestic Preparedness Coalition and George Mason University. All equipment needed to provide training, including PowerPoint projector is supplied by the National Domestic Preparedness Coalition. The training room will be supplied by the institution receiving training.

Optional HLS-CAM™ Facilitated Assessment

Optional HLS-CAM™ Facilitated Assessment will take place at the recipient institution. All materials for the assessment are supplied by the National Domestic Preparedness Coalition and George Mason University. The recipient university will provide adequate manpower to complete the assessment process.

Optional Vulnerability Assessment Kit

On third day of training, during the morning session, scheduled from 1100 – 1200 there will be a Vulnerability Assessment Kit, familiarization session, if the optional vulnerability assessment kit is selected. All items included in the kit will be described and their operating procedures will be explained. Participants will become familiar with and operate each piece of technical equipment during the familiarization session. During the afternoon practical exercise, course participants will use the Vulnerability Assessment Kit equipment in the performance of their Vulnerability Assessment practical exercise.

The Vulnerability Assessment Kit will be set up prior to the delivery of the HLS-CAM™ course. There will be no set-up necessary for the recipients. This is a turnkey kit.

6 Cost and Delivery

Costs are all inclusive.

| Product | Unit Price | TOTAL |
|--|--------------|--------------|
| HLS-CAM™ Methodology Training & Certification for up to 35 students | \$ 54,884.00 | \$ 54,884.00 |
| HLS-CAM™ Methodology Training & Certification for up to 35 students and Optional HLS-CAM™ Facilitated Assessment | \$104,884.00 | \$104,884.00 |
| Optional Vulnerability Assessment Kit | \$4,501.90 | \$4,501.90 |

